QUALITY CARE, INTER-SECTORIAL, COMMUNITY-DRIVEN HEALTH SERVICES IMPROVEMENT PROJECT FOR THE DEPARTMENT OF CHONTALES, NICARAGUA

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Glossary/ acronyms

AIEPI: Acronym in Spanish for Integrated management of childhood diseases (IMCI).

AIN: Acronym in Spanish for Integrated services for children, IMCI focused in nutrition.

ARI: Acute Respiratory Infections.

BASICS: Basics Support for Institutionalizing Child Survival activities.

BF: Breastfeeding.

BPNC: Basic prenatal clinical record.

CA Cooperating Agencies.

CHANGE: A project conducted by the Academy for Educational Development.

CHVs: Community health volunteers – brigadistas in Spanish.

CORU: Community oral rehydration unit.

CP: Community pharmacy. EBF: Exclusive breast-feeding.

EDA: Acronym in Spanish for Acute Diarrheal Diseases.

FONMAT: Acronym in Spanish for Safe Motherhood and childhood Fund (World Bank Project).

GMP: Growth/development monitoring and promotion.

HOPE: Project HOPE/Health Opportunities for People Everywhere.

KPC: Knowledge, Practice, and Coverage. LQAS: Lot Quality Assessment Sampling.

MCH Mother and Child Health.
MOH: Ministry of Health.
MTE Mid-term Evaluation.
OR: Operational Research
ORS: Oral rehydration salts.
ORT: Oral rehydration therapy.
PNC: Prenatal/antenatal care.

PROCOSAN: Community Health and Nutrition Program.

PROSALUD: A health project conducted by MSH with USAID funding.

SILAIS: Acronym in Spanish: Local integrated health system.

SWOT: Strengths, weaknesses, opportunities and threats/challenges.

TBA: Traditional birth attendant, trained.

TOT Training of Trainers. WFP: World Food Program.

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A. Mid Term Evaluation Recommendations and implementation

Below are listed the recommendations of the Mid Term Evaluation and the actions taken by the Project HOPE team in Chontales.

Recommendation: Re-prioritize interventions and select key objectives within each intervention.

Progress: All interventions were maintained. The identification of priority benchmarks contributing to project goals was made at the end of the Mid Term evaluation (MTE) in a workshop conducted with the participation of the external evaluator in charge of the MTE. Activities that did not contributed significantly to the achievement of project goals and thus were removed were: work with adolescent groups, monitoring of dietary practices with detailed surveys, promoting community gardens, promotion of chest in-drawing as a danger sign of pneumonia, monitoring diarrhea prevalence. Due to the low prevalence of wasting and moderate-severe malnutrition, the objective of reducing malnutrition prevalence was also removed, however the project will continue promoting Growth Monitoring and Promotion. The regional MOH participated in the process of selecting activities to focus in. The MTE report includes the distribution of effort in the intervention areas.

Recommendation: Focus on results rather than activities.

Progress: A reorganization process took place focusing on results as part of the re-prioritization of interventions. The Project HOPE CHONTALES staff received direct orientation in monitoring, evaluation and sustainability, which will help the team to stay focused on result- oriented management. As an example, the project as trained MOH staff in supervision of community health volunteer performance using a checklist. "sala situacional" (situation room) is another tool developed locally to have all MOH staff informed of the progress toward program objectives: results of monitoring rounds as well as routine data are plotted against time in a wall chart and compared with benchmarks previously agreed upon.

Recommendation: Remain focused on improving the capacity of the MOH, rather than providing less sustainable means of support or substituting the MOH in community outreach.

Progress: Activities are now focused on providing the tools and basic resources for better performance of health personnel. As an example, HOPE staff has been accompanying and advising the Municipal Health Units' Directors on supervision visits and the use of monitoring checklists, improving monitoring and supervision techniques including low-cost procedures such as LQAS.

Recommendation: Identify "Best Practices" and capitalize on these successes.

Progress: Best Practices have been identified within the successful examples of interventions and are being replicated with other partners: community pharmacies; follow-up to selected cases –i.e. anemic children- to learn if they received proper counseling and prescription, and the mother complied with it; facilitating monthly meeting between community leaders and health providers to discuss expectations and problem solving; the use of standardized guides for supervision and monitoring; and the use of LQAS in regular monitoring of program benchmarks

Recommendation: Improve use of data to make key management decisions.

Progress: The successful model of "situation rooms" is being replicated in each one of the eight municipalities as a tool for the use of data in decision-making management. Data is presented in a graphic, friendly format allowing comparisons over time.

Recommendation: Improve the capacity of Project HOPE staff.

Progress: Project HOPE has provided its Nicaraguan staff with training in sustainability, performance monitoring, and quantitative and qualitative research. Two members of the staff in Chontales are attending part-time postgraduate courses in Managua on weekends.

Recommendation: Improve IEC and training materials.

Progress: Project HOPE, together with BASICS, GLAXO, CHANGE and MOH developed a Mothers' Reminder Materials for home use, complementing the implementation of IMCI. These materials cover danger signs in children under 5 years. These materials are currently in the phase of validation. Also HOPE is implementing a Guide-Booklet for best practices at home, and a Community Committee Manual. Improvements have also been made in other materials compiled from different sources. The number of radio messages broadcasted has increased substantially since the MTE.

B. Technical report

1. Capacity building

Achievements

- o Work plans were adjusted according to the recommendations of the external evaluation (see above). The revised budget included a reduction in the ratio of administrative to technical staff.
- o In November 2000, a new Country Representative was hired for HOPE Nicaragua. The change from a part-time position to a full-time one was taken to strengthen program management, review and standardize administrative processes; increased project supervision, and improve contacts with national and international organizations. Before this change, HOPE maintained a part-time Director in Managua. Each project was managed independently. Now the HOPE office in Managua oversees all projects, has an increased contact with the USAID Mission and other institutions based in the capital city, and guides project staff to work as an integrated program for a better use of human and other resources.
- o Regular meetings of Country Representative and project managers are now a way to share successes, challenges, and lessons learned.
- O Project HOPE staff working in Chontales participated in a Sustainability Workshop conducted in Managua, November 2000, together with all Project HOPE employees working in Nicaragua. HQ staff participating and co-facilitating the sessions included the Regional Director for the Americas and the Associate Director, Maternal and Child Health. The participation of local MOH/SILAIS counterparts greatly contributed to the success of the workshop, which also benefited from input provided by the USAID Health Official in Managua, and staff from HOPE Guatemala and HOPE Peru.
- O Project Manager, Dr. Mario Ortega and the Country Representative, participated in a workshop on "Performance Monitoring", held in Guatemala on March 2001.
 As a follow-up commitment, technical staff working for HOPE in Chontales held a workshop on Performance Monitoring, and a SWOT analysis was carried out. Also, project activities and achievements were the subjected to a thorough performance analysis, see page 20.

Limitations

o Limited participation of MOH health personnel in some of the capacity building activities, caused by a declared lack of time due to multiple obligations, has slowed down the progress of interventions supporting sustainability objectives.

Recommendations

o Striving for continuous cooperation with the MOH/SILAIS personnel, including direct health care providers, is considered the key to a sustainable program. The purpose of this intervention is to ensure that heath personnel are promoting and carrying out field activities, with HOPE staff serving as facilitators, withdrawing gradually (see sustainability section).

2. Training

Achievements

- O A large number of training activities were conducted with MOH staff on topics related to project objectives. The main activities were geared to increase sustainability of community outreach activities, implementation of the IMCI strategy (AIN / AIEPI) in health facilities, facilitating the training of CHVs in community IMCI, and TBA training. HOPE has been able to implement all planned activities, and as a result health workers are using the supervision guidelines for facility-IMCI and are participating in the training of volunteers.
- o Project staff facilitated the training of CHVs and TBAs in five project interventions: diarrhea, ARI, Maternal Health, Nutrition and Immunization. We expect that the training of community-based providers CHVs and TBAs- will improve the quality of classification, case management, counseling of mothers and timely referrals.

Limitations

- o MOH workers still have a high turnover rate. This forces the project to keep training new personnel. An approach to solve this problem is to have training supervisors from the Health Centers carry out training activities during their regular supervisions.
- o TBA training can no longer be conducted in a single track or level. TBAs have been categorized by the MOH into three groups based on their educational background. Thus, the new training curriculum developed with project support does no longer meet the expectations of all groups. Written education materials will be given to TBAs classified as "A", creating conflict with the others TBAs that ask their children or grandchildren to read the materials to them.
- o Attendance by TBAs to training meetings is quite irregular, because of bad weather and the lack of transportation.
- o Supervisions by project staff show that CHVs are not investing enough time in individual counseling and group education in their communities.

Recommendations

- o Continue the strategy of supervisory-training for the municipal health director teams, supplementing them with the MOH methodology of self-study modules.
- o Improve coordination between health personnel and TBAs to accommodate to the time limitations of the TBAs when scheduling training activities. Potentially, the responsible person from the Health Unit could travel to a more central location so that long trips by the TBAs are minimized.

3. Technical Assistance

Achievements

 Technical assistance from Project HOPE's headquarters is received in the Country office (Managua) and Chontales by phone, E-mail, and site visits, making for a better and faster process to provide feedback and problem -solving.

- o The project received regular visits from Dr. Ivan Tercero, PROSALUD/MSH, to provide follow-up to our activities and to share experiences of other projects.
- o In February 2001, the Project provided TA to HOPE staff working in Boaco (another MCH project funded by USAID/Nicaragua) in using the LQAS methodology as a monitoring tool to assess project performance. The last TOT-LQAS manual, produced by NGO Networks, was translated into Spanish by Project HOPE.
- o Project HOPE municipal coordinators have continued giving technical assistance to health workers from SILAIS Chontales in methods, tools and designs for program evaluation; participatory adult education; proposal writing to improve the quality of MCH services –such as improvements made to delivery rooms; how to improve service delivery-, and advised on analysis of epidemiological and service data.
- o The project also received a site visit from Mr. Marco Polo Torres from BASICS, as part of the formative research for the development and validation of the Mother's Reminder Tools.

- Site visits for technical backstopping by HQ Technical staff may need to be increased so that Project HOPE's HQ can have a better understanding of the difficulties and progress of the project.
- o The Project HOPE Country Representative in Nicaragua needs to increase site visits to assess strengthen result-oriented management.

Recommendations

o More technical support and systematic monitoring of activities progress should help project staff maintain focus on interventions that will let them achieve their objectives.

4. Coordination with Project Partners

Achievements

- O Based on the recommendations of the mid term evaluation, a revised program plan was drafter for discussion with the partners. The process started with the MTE report, by prioritizing objectives that can be achieved within the project time frame, the recommendations of the evaluation team, and an internal analysis of resources available and commitments already made.
- O This drafted work plan was then shared with the rest of municipality directors, the SILAIS Chontales Director and the technical staff, and they participated in defining explicitly the roles that each institution would assume. As a result, work plans were produced for every municipality participating in this project.
- During the past year, each local health team has been held accountable for carrying out all planned activities within its "catchment" area and monitoring the results of those activities with LQAS (see below). Now, municipal coordinators in the project team have become facilitators of this process.
- o The project contributed to reactivate and support activities to promote breastfeeding in health facilities. Rural hospitals/health centers in San Pedro Lovago, Nueva Guinea and Juigalpa are in the process of being accredited as "mother and baby-friendly health units". The MOH workers

- in charge of integrated services for women with support from the nurses working in the municipalities- are developing plans to educate mothers through breast feeding support groups.
- O Starting in April 2001, CHV Workshops on clean birth were held with MOH workers. Also, workshops were held with MOH workers in charge of community outreach. The main product was a schedule and protocol for integrated visits to rural communities, providing immunization, Growth Monitoring and Promotion, control of pregnant women and newborns, health care and counseling. These workshops provided MOH workers with knowledge and skills to implement community IMCI with CHVs.
- Project HOPE is supporting the activities of growth monitoring and nutrition promotion, using the Honduras AIN approach in seven rural communities of the municipal of Juigalpa. Dr Diaz, the project municipal coordinator is training and supervising health worker and CHVs.
- On March 2001, a coordinating meeting was held with MOH representatives, TA agencies and a local consultant to revise the Mothers' reminder materials developed with the involvement of Project HOPE in Chontales. Two formats were chosen (spinning disc and pliable), both complying with the findings of the formative investigation funded by Glaxo-SmithKline. The work session produced valuable recommendations, such as using drawings instead of photographs. 1345 MRM were distributed in Chontales to mothers with children under 24 month.

o SILAIS Chontales has a liaison officer to coordinate with PVOs. However, this participation has been limited because that officer has not been given authority for negotiation and effective planning. Still, this person has helped to improve communication with the MOH at the local and central level.

Recommendations

- o Maintain close coordination with the SILAIS directors' team for programming of activities that will improve the quality of service delivery.
- o Prioritize already established written agreements with the SILAIS to enforce their commitment and participation in implementing and monitoring activities supported by the project.

5. Information systems

Achievements

- o Guides for monitoring community-based activities were produced. They will monitor services provided by CHVs, Community Oral Rehydration Units –CORUs-, maternal behaviors, (e.g., use of iron supplements), and exposure to education messages through local radios. Other instruments will monitor sales in community pharmacies, and integrated visits of MOH staff to rural communities. These guides and tools were field-tested and are now in use.
- o The project collected monitoring data in two separate rounds using the LQAS methodology to monitor results and not only activities- as recommended by the MTE. The results have been shared with the SILAIS and municipality directors during regular meetings for programming and allocation of resources.

- O During supervisions to rural communities, the project facilitated performance monitoring, using forms developed for IMCI. As a result, health workers have improved performance in classification of cases, recording demographic data and the distribution of iron and vitamin A supplements (data under analysis). On-site training integrated with site supervisions provided immediate individualized feedback to health workers.
- o The project also monitored the quality of services provided by CHVs. The main limitation found was the supply of ORS to CORUs.

- o The referral and counter-referral system is not working as well as it should, mostly because health providers, are not returning counter-referral forms to the community agents.
- o Health workers responsible for supervising CORUs are not gathering information about their activities. Supervisions revealed that the demand for CORU services is low.
- o Integrated visits are recording mainly the number of ill children seen, GMP and immunizations. Maternal health indicators are absent.
- All information systems activities, including the use of LQAS for performance monitoring, were slowed down by time limitations, material resources of the MOH for the reproduction of instruments, and acceptance by health personnel.

Recommendations

- o Help the Municipal Health Director's teams to provide follow-up of the most sensitive indicators and make decisions using the collected data to strengthen the work of the already established and new "situation rooms". This should help to better target communities with greatest health problems.
- Health center staff needs to use available information to support the work of the CORUs, as well as the management of diarrhea at home.
- o Maintain the current level of support by the project to strengthen the referral and counter-referral system.

6. Operations research

Achievements

- o Project HOPE in partnership with BASICS and CHANGE, and funding from Glaxo-SmithKline conducted a formal process to develop Mother's reminder materials. The steps were:
 - Stakeholder meeting with representatives of the different institutions promoting MCH in Nicaragua to motivate them to participate in the process.
 - Formative research to identify concepts, behaviors and maternal perceptions about illness danger signs in children. Participation of Project HOPE Nicaragua, BASICS, and Dr. Margarita Perez, a local consultant. See Annex.
 - Filed testing of prototype materials in three communities (one peri-urban and two rural) in the SILAIS of Jinotega and Chontales, with groups of mothers, fathers, grandparents, CHVs and TBAs, and health workers. A previously validated questionnaires and guides, were used to collect information from focus groups and key informants.

 A separate OR was conducted to improve the management of anemic children in the municipality of Acoyapa. Despite correct classification, referral and treatment in health facilities, many cases of anemia failed to recover because of low compliance with the prescription.

Limitations

Most health workers are neither involved nor experienced in operations research. Experience
with OR might allow them to understand obstacles for behavior change and increase the
effectiveness of interventions.

Recommendations

 Maintain support to scientific and technical gatherings in the local MOH to discuss MCH issues, and assist in developing operations research in areas that can provide useful information or resources to the medical and nursing personnel that provide direct care.

7. Community Outreach

Achievements

- A workshop was held on community organization for CHVs (brigadistas), with emphasis on the use of census and community maps. As a result, a significant increase in the number of CHVs that have mapped their communities was noticed.
- o March-April 2001: the Project supported the National immunization campaign. Visits to rural communities made possible to obtain other information for monitoring and evaluation.
- o 20 CORUs were re-activated. Health workers responsible for each municipality are monitoring the CORUs periodically.
- o The project helped in the implementation of 12 new community pharmacies. The Catholic Church gave communities a loan of C\$300.00 Córdobas (\$US 21.89) to buy an initial stock of basic medicines. The project facilitated the training of volunteers in charge of those pharmacies, using Rational Use of Drugs manuals developed by its technical staff.
- o The project broadcasted numerous health messages in three local radio stations.
- o The project continued supporting integrated visits to rural communities, previously planned and coordinated with the MOH workers responsible for the health units in that area.

Limitations

- o There is no follow-up of use of prescriptions, especially in the case of iron supplements, where there is usually little orientation and patient counseling to achieve compliance. Most mothers stop iron supplements immediately after the child develops mild side effects.
- o CHVs conduct few education activities for mothers.
- o There is frequent lack of iron supplements for pregnant women.
- o Lack of funds to cover per diems for health workers in charge of integrated visits to rural communities and follow-up to community-based providers.

Recommendations

- o Assist health personnel to improve counseling regarding iron supplements for mothers with anemic children under 2 years seen at the health units.
- o Train CHVs to provide counseling regarding iron supplements for children and follow-up at home.
- o Promote regular meetings of health personnel and CHVs to evaluate progress and verify completion of agreed-upon activities.

8. Sustainability

Achievements

Actions taken to increase sustainability:

- A joint Sustainability Workshop was held for MOH and Project hope staff in December 2000, with the support of HQ Technical Advisors and SILAIS directors, in preparation for the development of the 2001 annual SILAIS and Municipal plans.
- o The project supported the training of a team of master trainers (8 teams, 4-5 members each) from the MOH as facilitators for health workers and CHVs to implement IMCI and educational curricula for TBAs. MOH master trainers revised and adapted the education methods and curricula for TBAs.
- o Municipality health directors and MOH workers held quarterly meetings to assess monitoring indicators and to propose changes to improve both access and the quality of MCH services.
- Nurses responsible for community outreach activities in each municipality have been systematically monitoring data from supervisions to CHVs and TBAs. As the previous point, this initiative is already institutionalized.
- o Referrals of complicated cases from communities to health services are being continued. The number of maternal deaths have decreased considerably from 11-12 per year (1999-2000) to 7 in year 2001. (Source: MINSA SILAIS statistics, Chontales 2001).
- o MOH workers have improved their working relationship with TBAs and CHVs at the community level. CHVs and TBAs are providing MOH workers with information about the location of pregnant women, newborn children and provide logistical support to visits to rural communities providing integrated health care ("Visitas Integrales", see above).
- o Brigadistas responsible for CORUs have made the commitment to increase efforts to spread health messages. They now educate mothers groups in ORT, the rational use of antibiotics, danger signs (using the Mother's reminder materials mentioned above), and when to seek help from the CORU or a health facility. This is being strengthened in the municipalities of Acoyapa and San Pedro de Lovago with the distribution of materials that help identify danger sings at home.
- o According to supervision data, all community pharmacies (20 active) are adequately stocked with essential medicines.
- A local committee has been formed to support "Mother and baby-friendly health units" to achieve the accreditation of maternity facilities in the municipalities of Santo Tomas, Nueva Guinea, Juigalpa and Villa Sandino.
- o Phase-out plan is under development, in coordination with the SILAIS and other partners. The local MOH is already taking responsibility for a large proportion of outreach activities.

o HOPE has plans to continue working in Chontales under contract from FONMAT, a local agency in charge of promoting maternal and child health. The USAID Mission is pleased that Project HOPE is willing to try new approaches in the context of the Health Reform. HOPE has also submitted letters of interest to PAININ (Comprehensive Child Care Program, in Spanish) to explore if some of the project activities –integrated approach to promote also health and early stimulation of preschool children enrolled in "soup kitchens"- can continue with support from PAININ. Municipalities prioritized include Nueva Guinea, El Ayote, San Pedro and Acoyapa. Other MCH program that is being supported by HOPE is PROCOSAN (Community-based Health and Nutrition Program) in the municipality of Juigalpa.

Limitations

- Planning by the SILAIS and MOH staff remains inadequate to provide basic health care to mothers and children. They have not diversified their funding sources. Most of their requests are not related to project activities.
- o MOH workers find it difficult to provide follow-up to breastfeeding support groups because of the need to regularly visit rural communities.
- o Turn over/desertion of CHVs is high approximately one third of the CHVs who are heads of family have left the country looking for a better-paid job.
- o The availability of ORS packets is affected by inefficient re-supply lines. As a result, demand for CORU services is low mothers are not pleased with switching to home-based fluids.

Recommendations

- Assist the SILAIS in the preparation of proposals to broaden the sources of funding for MCH activities.
- Promote increased involvement of MOH personnel in the activities of the breastfeeding support groups. Coordinate efforts with health units to identify mothers that should join the breastfeeding support groups.
- o Identify new CHVs with the desire and time to get involved in community health work. Explore mechanisms to provide community compensation for promoters. Promote with the MOH the implementation of traditional but discontinued forms of motivational community health personnel. In the past, identification badges and annual gatherings to share experiences have been successful.
- o Increase awareness of the benefits of home-based fluids to treat diarrhea, and rationale use of antibiotics.

9. Donations to the SILAIS Chontales

Achievements (See also Annex #12)

- o Four computers were donated to support the health information system -mother/child component- and the routine health statistics in the municipalities of Nueva Guinea, Santo Domingo Acoyapa and Santo Tomas.
- o The project printed education materials for workshops.
- o Health services were provided with monitoring guides and forms.

- o Each municipality was given BF manuals to help advising BF support groups.
- o Santo Domingo had some equipment repaired supported by the project to improve maternal and newborn care.
- o CORUs were provided with printed materials and stationary to produce census and community maps and classification charts for diarrhea.
- o Community pharmacies were given a manual.
- o Project vehicles supported integrated visits to rural communities.
- o Essential medicines and medical supplies worth US\$350,225 were donated to the SILAIS Chontales in the last year.

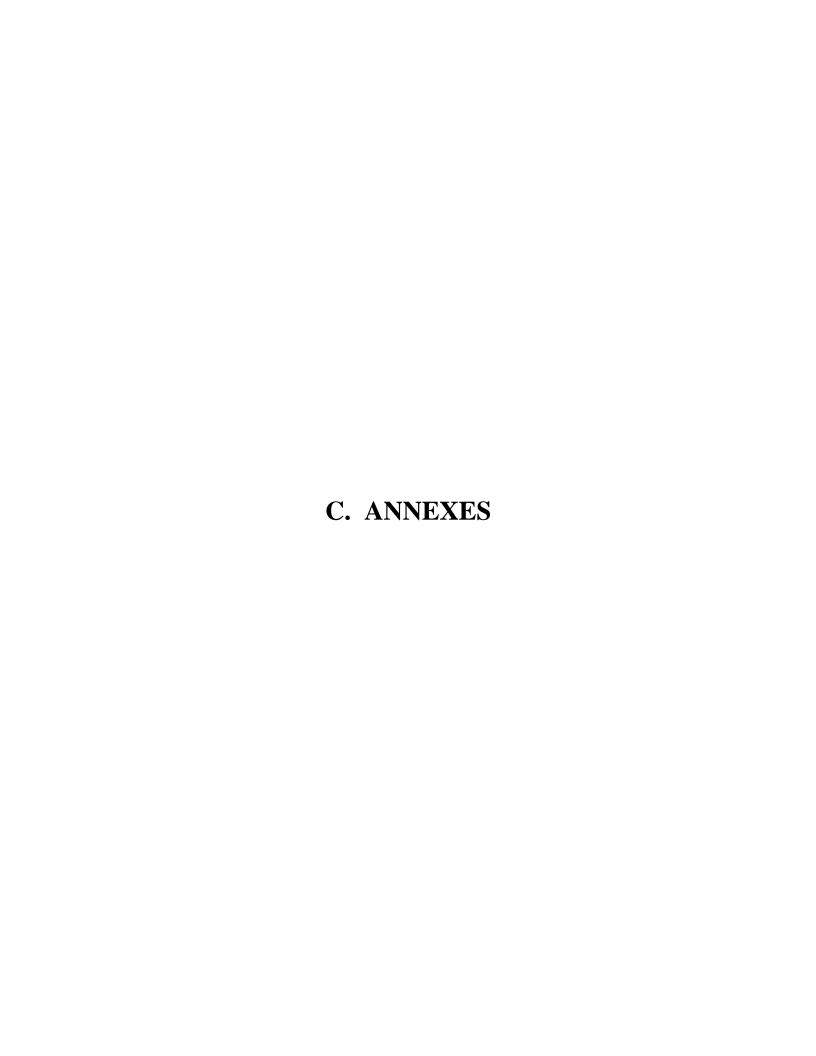
o Up to this point the Project has not identified specific limitations, other than time required for the donations to reach their final destination. This is due to the level of support provided by the central level of the MOH for customs, warehousing, inventorying and distribution.

Recommendations

o Continue to assist the SILAIS with donations of medicines and medical supplies, especially those that that improve patient care and support the key interventions for mothers and children.

10. Administrative Issues

- There was a delay in the after-midterm-evaluation budget review to adjust it to the reprioritization of activities, which delayed some commitments -for example the dissemination of radio messages.
- o When the second half of the project started, project vehicles required repair, which was an obstacle to systematic follow-up to fieldwork in rural communities. This was solved by the acquisition of two other vehicles with HOPE funds.
- O The limited funds of the SILAIS for per diems for health workers who carry out integrated visits and follow-up activities with community agents, causes some of this activities to be postponed for long periods.



ANNEX 1 RESULTS OF MONITORING WITH LQAS

Annex 1: Results of LQAS Monitoring

1. Objectives:

The Monitoring with LQAS was added after the Mid Term evaluation to allow project staff to manage by results. By comparing with the benchmarks set in the DIP the staff can identify the interventions showing the poorest performance. Also, by comparing supervision areas using a stratified analysis, the level of effort in those supervision areas can be modified accordingly.

2. Methodology:

Staff training: The manager had attended a LQAS workshop conducted by Nicasalud, described elsewhere (ttp://www.ngonetworks.org/pubs/pdf/Nicsalud_Jinotega_Complete_L.pdf). HOPE staff in Nicaragua with previous experience in LQAS surveys also provided support.

Technical assistance was also received from Joe Valadez (PVO Networks) and Donna Espeut (CSTS)

There were four supervision areas: Municipalities of Santo Domingo, San Pedro, Santo Tomás and Acoyapa.

Sample: 19 mothers with children under 24 months of age.

Fieldwork was conducted by Project HOPE staff and selected MOH workers with previous experience in surveys in two rounds during 2001. The revision of the forms collected in the first round (May 2001) found that the procedures to select the sample had been biased towards a more accessible group of the population. Thus, only data from the second round will be included in this report.

Short questionnaires included only data relevant for the interventions and objectives set in the DIP.

Tabulation workshop: conducted immediately after the quota agreed upon was completed.

3. Results:

76 questionnaires were completed; 19 in each supervision area. See results in table 1. Maternal indicators are below expectation in the entire project area. For child health indicators, most supervision areas are above the expectation. The LQAS allowed the project staff along with the Municipalities to focus on and define supervision areas when coverage rates were below expectations.

Table 1: Results:

Project HOPE, Chontales monitoring of knowledge, practices and coverages

	Benchmark set in the DIP	Baseline	Midterm	LQAS 2 nd	Progress
		(1998)	(2000)	monitoring (2001)	on target?
lm	Increase complete immunization coverage rate from 65% to 80% (children 12-23mo)	65.0%	58%	95% (72/76)	Yes
BF	Increase from 17 to 30% the percentage of mothers exclusively breastfeeding their infant for the first six months	16.7%	24%	25% (19/76)	Yes
	Increase from 50 to 75% the percent of children receiving BF during the first eight hours of birth	46.9%	52%	81% (61/76)	Yes
	Increase from 17 to 30% the percentage of children aged 20-23 months still breastfeeding	17.1%	24%	58% (44/76)	Yes
	Reduce from 28.5 to 15% the prevalence rate of anemia in children below 6 years	ND	49%	40% (30/76)	No
	Increase from 70 to 90% the proportion of children with growth monitoring in the last 4 months, in children <2yr	70.2%	71%	89% (68/76)	Yes
Dia Pne	Increase from 39% to 50% the ORT use rate	39%	25%	49% (37/76)	Yes
	Increase from 18 to 50% the percentage of mothers able to recognize danger (and dehydration) signs	18%	23%	60% (45/76)	Yes
	Reduce from 71% to 50% the percentage of cases of diarrhea being treated with antibiotics/ anti-diarrheic drugs	70.9%	50%	64% (49/76)	Yes
	Increase from 3% to 20% the percent of mothers asking the brigadista/CHV for help when their children have diarrhea	4.3%	6%	18% (14/76)	Yes
	Increase from 45% to 60% the percentage of mothers giving the child more/equal amounts of liquids during diarrhea	44.5%	53%	75% (57/76)	Yes
	Increase from to 70% the proportion of mothers who continued feeding the child during diarrhea	37.3%	41%	68% (52/76)	Yes

	Increase from 45% to 80% the proportion of mothers able to recognize fast breathing as a danger sign	45%	58%	75% (57/76)	Yes
	Increase to 80% the proportion of pneumonia cases treated according to the IMCI protocol	ND	ND	ND	ND
MH	Increase from 25 to 50% the proportion of mothers retaining their HCPB (basic perinatal record)	25.3%	30%	64% (46/76)	Yes
	Increase to 90% the proportion of pregnant women with at least one prenatal visit - among those with HCPB	24.2% all women	82%	58% (44/76)	No
	Increase from 19% to 50% the proportion of mothers having at least one postnatal visit	24%	29%	53% (40/76)	Yes
	Increase from 40% to 90% the proportion of mothers with 2+ doses of TT vaccine (among those with immunization cards)	40%	43%	34% (26/76)	No

Table 2: Prioritization of supervision areas according to LQAS monitoring

Objective	Municipalities to focus on
Increase complete immunization coverage rates	Santo Domingo
,	Nueva Guinea
	Villa Sandino
	Juigalpa
Increase exclusive breastfeeding rates (infants<	Nueva Guinea
6 months)	San Pedro
	Juigalpa
	Santo Domingo
Increase ORT use rate	Nueva Guinea
	Cuapa
	Acoyapa
	Juigalpa
	Santo Domingo
Increase the percent of mothers asking the	Nueva Guinea
brigadista for help when their children have	Villa Sandino
diarrhea	Cuapa
	Acoyapa
	Juigalpa
	Santo Domingo
Reduce the percentage of cases of diarrhea	San Pedro Lovago
being treated with antibiotics/ antidiarrheal drugs	
Increase the proportion of mothers retaining	Nueva Guinea
their HCPB (basic perinatal record)	Juigalpa
	Santo Domingo
Increase the proportion of pregnant women with	Nueva Guinea
at least one prenatal visit	Cuapa
	Santo Domingo
Increase from 19% to 50% the proportion of	Nueva Guinea
mothers having at least one postnatal visit	Santo Tomás
	Villa Sandino
	Juigalpa
	Santo Domingo

ANNEX 2 BENCHMARKS

Annex 2: Benchmarks Indicator or objective (DIP)	Goal set for LOP	Progress towards the goal cumulated to end of year 3	Progress on target
Capacity building			
SILAIS and other partners conducting regular sessions of the departmental/ district health committees	ND	Objective achieved in year 1, DHC meeting regularly	Yes
IMCI norms implemented	ND	Community IMCI supported; Monitoring of case management in health facilities (clinical IMCI)	Yes
Health Information System used in decision making	ND	"Situation rooms" routinely analyzing health statistics	Yes
Incentives to retain volunteers in place	Drop-out rate halved	None	No
Community-based mechanism to distribute drugs at cost	ND	See below	Yes
MOH and others partners assessing the impact of activities on maternal know-ledge and practices on health/nutrition	ND	LQAS rounds 2-3 times a year using household visits and exit interviews, follow-up of selected cases	Yes
Sustainability			1
Strengthen Education Committee (TOTs)	EC participating in follow-up of training, supervision and monitoring	Objective achieved in year 1 EC in charge of micronutrient workshop	Yes
Project activities scaled up by local NGOs	NGO partners extending project activities	Community pharmacies scaled up by other NGOs	Yes
Train master trainers	25 master trainers	Eight teams (4-5 members each) are active	Yes
Train counterpart	75 FONIF staff trained in nutrition education	Objective achieved	Yes
Strengthen monitoring and supervision plans for volunteers	Supervision plan	Monitoring guide developed Supervision routine in all municipalities	Yes
Unified HIS for planning and decision-making	Integrated, functional HIS	Computer equipment and training has improved data quality, flow, and timely use	Yes
Train volunteers and TBAs in CS interventions	200 brigadistas (CHVs) and 200 TBAs trained	200 brigadista trained 200 TBAs trained 100 CORU managers trained	Yes Yes
Basic health services provided in "integrated visits" to rural communities	2-3 visits/year made to isolated, rural communities	31 conducted in year 3, out of 24 planned	Yes
Volunteers promoting/conducting CS education in communities	100 rural school teachers in nutrition and RH	Training of rural teachers ended after Midterm Eval.	No
Rural schools providing nutrition education through gardens	50 gardens/year	15 gardens achieved in first year. Activity deleted after Mid Term Evaluation (MTE)	No
Improve access to basic drugs	50 community pharmacies	Benchmark changed to 20 after MTE. 20 active.	Yes
Objectives added after MidTerm ev			
Improve project documentation	Comprehensive quarterly reports produced for partners, country Rep, HQ, donor	Reports improved in content and organization	Yes
Technical support to health facilities to be accredited as "Baby-friendly"	Four per year	18 accredited in year 3	Yes
Support IEC campaigns conducted by the SILAIS	Radio messages	Radio messages, Mother's reminder materials developed	Yes
Train HOPE staff	ND	Staff attended workshops on Sustainability, IEC, Monitoring	Yes

ANNEX 3 VALIDATION OF MOTHER'S REMINDER MATERIALS

Annex 3: Validation of Mothers' Reminder Materials For danger signs in children younger than five years old PROJECT HOPE CHONTALES June of the 2001

Executive Summary

*Based on the results obtained in the formative research about danger signs in young children, Project HOPE began the process of elaboration of reminder materials to be used by the mothers of children younger than five years, testing two designs for the materials, that contain the same information, but had different presentation.

To identify the preferences and opinions of the target population, Project HOPE carried out the validation of the reminder materials according to the following objectives:

- To prove the effectiveness of message communication and attractiveness of the printed reminder materials among the target population, and to implement the necessary changes according to suggestions that were obtained, with the purpose of ensuring desired impact.
- 2. To identify the target population's preference regarding type of reminder materials according to ease of use and inducement to search for health care.

To carry out the validation of the reminder materials, a technical qualitative technique was used, in particular the performance of interviews to groups and individuals. The sample group was conformed by 6 members of a family (mothers and parents with children younger than five years and grandmothers), plus other 18 people, 9 brigadistas (CHVs)/midwives (TBAs), and 9 health Personnel.

The selected communities were 2 in the urban area and 1 rural, located in the departments of Jinotega: Pueblo Nuevo, The Fundadora and Germán Pomares, and Chontales: Acoyapa, San Pedro Lóvago and Santo Tomás.

*For the validation, two types of reminder materials were tested, both containing the same drawings and texts but having different design, one was a "foldout" and the other one had a "revolving" area.

A validation guide was designed containing 120 questions organized in 15 sections. The fieldwork was made in the agreed period from the 18 to 22 of June 2001, and carried out simultaneously in the selected communities of each department.

The results were as follows:

*Comprehension was evaluated by asking the participants to express their opinion about each sentence or drawing. The participants understood all messages. Understanding of the graphics was good, in most cases participants guessed right, but was partially limited by quality of the drawings.

- *Regarding the Acceptability of the material which is also denominated as "culturally compatible", the participants agreed that all the sentences contained in the material were known, and that the idea of the message was clear because these were words that are generally used.
- *As for the drawings, most of the danger signs that were depicted were readily understood, since they reflected the reality of everyday life according to the morbidity processes presented by children.
- *The attractiveness of the material for the population, whether or not it is interesting calling and maintaining their attention. All participants found the material attractive. In one particular case even though the drawings were accepted, suggestions were made for improvement of the material.
- *Two elements that were included in the material with the purpose of making them more attractive and more useful, were the inclusion of a calendar and a mirror. These elements were also evaluated regarding acceptance and utility. Responses indicated that both elements were good choices, because inside the reminder material "they are useful."
- *When showing the participants the two versions of the proposed materials, the preference was for the reminder material designed in the "folding" or pliable format.
- *Considering the results obtained in this validation, the reminder materials addressing danger signs, directed to the mothers of children younger than five years, were found to have "effectiveness" and "attractiveness" according to the established criteria of: Attractiveness, Easy Understanding, Acceptability and Inducement to look for medical help.
- *The suggestions made by the participants, in particular those related to the drawings of other signs of serious illness, and aspect of the health center were taken into account since these are considered objective and of substance.
- *As for the written part of the material, it was understood by the literate part of the target population
- *The target population insisted on the inclusion of the mirror and calendar as part of the reminder materials, and it is recommended to keep it as part of the design for future materials.
- *The preferred reminder material was the "folding" type, which was adopted as final design, considered to have bigger drawings and present more information at once.

ANNEX 4 REPORT OF FORMATIVE RESEARCH ON DANGER SIGNS

Annex 4 PROJECT HOPE, BASICS, CHANGE, GLAXO-SMITHKLINE Mothers' Reminder Materials Formative Investigation Results DECEMBER 2000

Objective

Recognition of danger signs in children younger than two years of age by mothers, parents, grandparents, midwives and Brigadistas in three municipalities of the departments of Chontales and Jinotega.

Executive Summary

A Formative child health investigation was made, with the purpose of obtaining information, which could contribute to the definition of the type of reminder material for early identification of danger signs in young children, and the opportune search of medical attention by their parents. The results are indicative of the population's attitudes regarding the handling of illnesses, the factors that impact on delays to search for medical attention, the perception of the signs of danger, the forms of popular expression of these signs, and the degree of understanding of terms used by the medical personnel for these signs.

The technical qualitative methodology used, involved the participation of focal groups of mothers with children younger than two years of age and spouses, and grandmothers. Interviews were structured and directed to mothers that had had sick children, also involving Brigadistas and midwives living in three municipalities of the department of Chontales and three municipalities of the department of Jinotega. An evaluation of fifteen danger signs was carried out with these focal groups, which had been defined from the medical point of view and the fact that these are part of the strategy of Integral Attention to Childhood Prevalent Illnesses. In total work was conducted with 26 focal groups and 24 interviews made, obtaining the following results:

- -The population recognizes the need to look for the health personnel's help, when the child is sick; however, in most cases this search is made only after one—two days of initiation of the morbidity process, the first action that the mother takes is the use of homemade remedies. One of the limitations stated for the delay to search of help is the economic situation and the lack of medications at the of health units.
- -The general concept of severity of the illness, both in the child younger than two months and the child younger than two years of age, is associated with the loss of the child's appetite, the weakness and the continuous crying. In the particular case of breathing problems these are associated to quick breathing (Fatigue), and in diarrhea to the frequency and watery consistency of the bowel movements, as well as to the observation of the sunken eyes.

- -Most of the medical terms were understood textually, however the population used "synonyms." The terms they found difficult were seizures, unconsciousness, dehydration and lack of weight gain.
- -No educational materials were found in the visited homes and it was difficult by the team of investigators to assess the infant's immunization identification card's correct use, since mothers do not consider it important to keep it and maintain it current.
- -In relation to the preference regarding educational materials, the population chose the calendar (for its utility) and the poster (for the size, photographs, color and decorative character). However this may be due to the limitations presented in the present investigation (lack of experience with educational materials at home), a book of samples had to be presented by the investigators to the participants and health personnel. Therefore it cannot be inferred, which type of educational material would be most appropriate to design as danger signs reminder material, neither the system of distribution of the same.

Based on the results obtained, the following recommendations are made:

- -From the fifteen danger signs presented to the population, select those that they identify most easily: "lack of appetite, does not want to breastfeed" (loss of the appetite), "general weakness and continuous crying", as signs indicating any morbidity process of the child. For the cases of the acute respiratory illnesses and the acute diarrhea, were proposed the terms "fatigue" (quick breathing) and "hollow eyes" (sunken eyes), respectively.
- -To corroborate the generalized use of the terms identified, as well as the understanding by mothers, involving them in the process of definition of the messages.
- -As for the printed materials, to expand in the aspects of attractiveness and acceptance of the calendar and the poster, with the purpose of obtaining more information that facilitates the selection one of them.
- -The use of photographic images was preferred, but may prove to be impossibility due to the degree of difficulty to obtain and reproduce quality pictures.
- -The use of short messages considering the literacy level of the target population.

ANNEX 5 FORMS USED IN FIELD SUPERVISIONS

Annex 5: Forms used in field supervisions

DATE 18/07/01

PROJECT HOPE – CHONTALES MONITORING GUIDE COMMUNITY HEALTH AGENTS

NAME OF CHV/TBA:

COMUNITY:

	DATE:		N	MUNICIPALITY:					
No	ACTIVITIES			ANSWERS					
1	Do you have a census and mapper groups in your community (pregrethildren under 2 years of age)?			YES	NO	IF is NO, pass to questio 3			
2*	Are the census and map update	d? (last	3 months)	YES	NO				
3*	What health activities have been performed in the last three months?. Correct if c and d are a. Participate as active member of the community health committee b. Support and/or promote NACIONAL HEALTH CAMPAIGNS c. Support to SILAIS integrated visits d. Do you conduct counseling during integrated and domiciliary visits, or meetings?* Specify the topic(s) given in education and counseling sessions:						Yes Yes Yes Yes Yes Yes Yes	NO NO NO	
	Other activities:								
4 *	How many information or training meetings called by the SILAIS have you taken # TIMES: part of in the last 3 months?:								
	In the last 3 months have you ca	red for	and/or refer	red women	or children:		YES	NO	
5*	GMP: # CasesI	mmuniz	zations: # Ca	uses					
	Diarrhea: # Cases # C	DRT: () # Referre	ed: () # No	ot referred:	()			
	ARI: # Cases # Treatr	ment wi	th antibiotics	s: () # Ref	erred: ()	# Not referred:	()		
	Pregnant women to: ANC #	C	hildbirth #	Pos	stnatal care	e#F	P#		
6	Only for TBAs: How many births have you assis	ted in tl	he last 3 mo	nths? # CI	hildbirths: _				
7	Have you registered and notified						YES	NO	
7.1	If there were any births, how ma months?	ny of th	em have be	en in the las	t three	# Births:			
	If there were women or children'	s death	s in the last	3 months re	gister them	1:			
	Name	Sex	Age	Cause of d	leath	Women	Child	ren	
7.2									

No			
INU	١.		

PROJECT HOPE – CHONTALESMONITORING GUIDE FOR RADIO MESSAGES

Nam	ie	of		the					mother:
			Comr	nunity:					
Mun	icipality:			e:					
To b	egin the interview	make sure tha	t there's a	radio in	the m	other's	s hor	ne	
		Question	S					Ans	swers
1*	Is there a radio in the			YES	NO	If NC	go t	o the	question 6
2	What limitations do t		radio to wor	k everyda	ay?			ttery	
3*	What station do you	listen to more	a.	b. Chon	taleña	c. Mana	ntial	Othe	∍r:
	often?		Centro						
4	Who listens more fre								
5	What times of the da					AM			PM
6*	Do you have other m	neans for listening	g to the	YES	NO	lf			nd of the
	radio?							ntervi	
	SA SILAIS-Chontales			casting h	ealth m	essage	s (me	ention	the name
	e station according to	•	• • •						NO
7*	Have you ever listen			ssages?	1 " 6	V. (!	Y	ES	NO
8	How many times did					of times:	Mai	i	Λ f t α κα α α α
9	What time of the day				re rrequ	uentiy?	IVIOI	rning	Afternoor
	Tell me about the he Diarrhea:	aith messages th	at you reme	ember:					
	Diairriea.								
	Pneumonia:								
40*	Nutrition and Breastf	feeding:							
10*									
	Immunizations:								
	Mother's health (Antenatal care, Childbirth services and postnatal control):								
	0.1								
	Others:								
4.4	D 41:1.41.44								
11	Do you think that the	ese messages cai	n neip you c	are for th	ie nealt	n of you	r	YE	S NO
12	children? Why?								
12	vvriy?								
13	What would you reco	ommend to impro	ve these me	essages?					
10	Wildt Would you look		vo 111000 1110	ooagoo.					
	L								

No.

PROJECT HOPE – CHONTALES MONITORING GUÍDE FOR MOTHERS IRON SUPPLEMENTS

Nam	e of the mother:							
Com	unity:Municipality	y:						
Date								
No	QUESTIONS ANSWE							
1*	Have you given Iron supplement to you child in the last 4 months?	YES	NO					
	If NO, Ask the mother why and then skip to question num	ber 7:	·					
2*	How many times per day have you been giving iron your	child? # times:						
3*	How long have you been giving iron to your child? Take n weeks)		(8 or more					
4*	What kind of iron-rich food do you give to your child? (is	it served with fru	it -citric- juices?)					
5	What kind of problem was presenting your child at the moment of receiving the iron?							
	What did you do to solve the problem?							
6	Could you show me the bottle of iron that is being given to the child?	Shows it	Doesn't show it					
7	When was the last time that your child consumed iron? Ta (last 3 months)	ake note the # M	lonths:					
8	Do you know foods that containing iron? Yes () Could	you named som	e? No() END					
9	From the mentioned foods with iron, which are you giving	your child?						
10	How many times do you give your child these foods?	# TIMES:						

PROJECT HOPE – CHONTALES MONITORING GUIDE- CORUS

Name	of responsible:					
Comu	nity:					
Date:						
No	Description / Activity			Results	3	
1 *	Do you have materials (ORS, other) to treat	diarrhea cases	YES		NO	
2 * 3 *	Do you have note book for register the CORI		YES		NO	
3 *	Do you have register of the diarrhea's cases	in the last quarter:				
	# Cases:	Referred Cases:				
4 *	What treatment do you recommend for treati	ng diarrhea cases:				
5 *	Have you counseled mothers that visit CORL	Js		YES	NO	
5.1	If yes, What topic did you talk about:		1			
6*	When was the last time that you informed your activities to the MOH. # Months (Correct if is it least than 3 months)					
7	Do you have all CORU supplies (e.g., pitch)	in good condition:	٠,	YES	NO	
7.1	If no, what is missing?	good condition		. = 0		
8 *	Have you been supplied by the MOH with OF packages there are in existence in the CORL		'ES	NO #U	nits:	
8.1	If no, ask why:	,	<u> </u>	,		
9 *	9 * What are the signs and symptoms you use to assess a child with diarrhea: (correct if name as least two signals) Sunken eyes (), Irritable (), Skin fold sign(), thirsty (), sleepy(), sunken fontanel (),poor general status()					
Do you	have limitations top conduct your work (e.g.,	lack of incentives):				
SUPE	RVISOR NAME.					